

Notice of Allowability	Application No.	Applicant(s)	
	10/534,282	MILLAR, ROBERT PETER	
	Examiner	Art Unit	
	Padma V. Baskar	1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/7/2010.
2. ☒ The allowed claim(s) is/are 1-11,13,16 and 28-32.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>5/3/2010</u> . 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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DETAILED ACTION

1 The amendment filed on 5/7/2010 is acknowledged and entered.

Status of Claims

2.

Claims 12, 14-15 and 17-27 are cancelled.

Claims 1, 4, 5, 31 and 32 have been amended.

Claims 1-11, 13, 16 and 28-32 are under consideration.

3. In view of the amendment to the claims, the rejection of record for claims 1- 3 and 30 under 35 U.S.C. 102(b) as being anticipated by Mathias U.S.Patent No: 5,434,136 is withdrawn.

4. In view of the amendment to the claims , the rejection of record for claims 1- 11, 13,16 and 28-32 under 35 U.S.C. 102(b) as being anticipated by Meloen U.S.Patent No: 7,361, 349 is withdrawn.

5. In view of the amendment to the claims and arguments, the rejection of claims 1- 11, 13, 16, 28-32 under 35 U.S.C. 112, second paragraph is withdrawn.

Reasons for allowance

6. The claims 1-11, 13, 16 and 28-32 are allowed because the prior arts Mathias U.S.Patent No: 5,434,136 and Meloen U.S.Patent No: 7,361, 349 do not teach or suggest synthetic peptide SEQ ID NO: 1-3, wherein each of the amino acids are in the D-amino acid configuration that induced antibodies that are functional to inhibit native GnRH and vaccine composition. The GNRH PEPTIDE analogs (not D amino acid configuration) disclosed by these prior arts have not been shown to be effective immunogens and thus teaches away from the claimed synthetic peptide SEQ ID NO: 1-3 having D-amino acid configuration. The claimed peptide has been shown that inhibited GnRH stimulated inositol phosphate (IP) accumulation in COS-1 cells transiently transfected with human GnRH receptor (Fig. 4a). Further , the antibodies (figure 5a) bound to native GnRH (Fig. 5b).Mice immunized with RI-GnRH peptide and CpG as adjuvant produced anti-RI-GnRH antibodies, which cross-reacted with the native hormone (Fig. 7) and mice were infertile (Fig. 8).

6. Claims 1-5, 28-32, 6-11, 13 and 16 are allowed and have been renumbered as 1-18 respectively.

7. Papers related to this application may be submitted to Group 1600, AU 1645 by facsimile transmission. Papers should be transmitted via the PTO Fax Center, which receives transmissions 24

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hours a day and 7 days a week. The transmission of such papers by facsimile must conform to the notice published in the Official Gazette, 1096 OG 30, November 15, 1989. The Right Fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PMR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PMR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Padma Baskar Ph.D., whose telephone number is ((571) 272-0853. A message may be left on the Examiner's voice mail system. The Examiner can normally be reached on Monday to Friday from 6.30 a.m. to 4.00 p.m. except First Friday of each bi-week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Robert B. Mondesi can be reached on 571)272-0956.

Respectfully,
/Padma Baskar/
Examiner 1645

/Robert B Mondesi/
Supervisory Patent Examiner, Art Unit 1645